

WHAT IS CLAIMED IS:

1. A target object modification apparatus
comprising:

an aligner device configured to be able to
5 manipulate a posture of a supplied target modification
minute object;

first feed means configured to be able to supply
the target modification minute object to said aligner
device; and

10 injection means configured to be able to inject
modifiers onto the target modification minute object
after the target modification minute object is set to a
predetermined posture by said aligner device.

2. The apparatus according to claim 1, further
15 comprising an opening from which the modified target
modification minute object is extracted, and second
feed means for feeding, to the opening, the target
modification minute object after fixing the modifiers.

3. The apparatus according to claim 2, further
20 comprising a storage reservoir to store the target
modification minute object after fixing the modifiers,

wherein said second feed means feeds the target
modification minute object after fixing the modifiers
to the storage reservoir.

25 4. The apparatus according to claim 1, further
comprising a target modification minute object
reservoir which can store a predetermined amount of

target modification minute objects, and a modifier reservoir which can store a predetermined amount of modifiers,

wherein said first feed means feeds each target
5 modification minute object from said target
modification minute object reservoir to said aligner device, and said injection means is connected to said modifier reservoir.

5. The apparatus according to claim 4, wherein each
10 of said target modification minute object reservoir, said modifier reservoir, and said storage reservoir to store the target modification minute object after fixing the modifiers has a cartridge shape and is detachable.

15 6. The apparatus according to claim 1, further comprising a fixing device to stably fix the modified target modification minute object.

7. The apparatus according to claim 1, further comprising a recovery mechanism to execute at least one
20 of cleaning and sterilization of said injection means.

8. The apparatus according to claim 1, wherein said aligner device has a structure in which a plurality of manipulation electrodes are arranged around a recessed hole.

25 9. The apparatus according to claim 1, wherein a plurality of aligner devices are arrayed to be able to simultaneously modify a plurality of target

modification minute objects.

10. A control method for a target object modification apparatus, comprising:

5 a supply step of supplying a target modification minute object to an aligner device capable of manipulating a posture of the target modification minute object; and

10 a driving control step of, after the target modification minute object is set to a predetermined posture by the aligner device, executing driving control to cause an injection head to inject modifiers onto the target modification minute object.